

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (previously presented): A worm gear for a vehicle steering system, said worm gear adapted to be bidirectionally driven, said worm gear comprising a shaft swivably mounted for swiveling in the radial direction, a worm disposed in a rotationally fixed manner on said shaft, and a worm wheel meshing with said worm, said worm and said worm wheel preloaded in the radial direction, said worm wheel having teeth, each said tooth having right side and left side tooth flanks which are inclined at respective right and left side pressure angles, the right side pressure angle and the left side pressure angle being different from each other so that the normal force between said worm and said worm wheel is independent of the direction of rotation of a torque exerted on said worm by said worm wheel.

Claim 2 (previously presented): The worm gear according to claim 1, further comprising a housing, said shaft is mounted in said housing by means of a fixed bearing and at least one loose bearing, said loose bearing displaceable in the radial direction in said housing.

Claim 3 (previously presented): The worm gear according to claim 2, wherein said housing comprises a slot for receiving said loose bearing, the longitudinal axis of said slot extending in the radial direction.

Claim 4 (previously presented): The worm gear according to claim 2, further comprising a support ring, wherein said loose bearing bears against said housing via said support ring.

Claim 5 (previously presented): The worm gear according to claim 2, further comprising a spring element disposed between said loose bearing and said housing or between said support ring and said housing.

Claim 6 (previously presented): The worm gear according to claim 5, wherein said spring element is a spiral spring.

Claim 7 (previously presented): The worm gear according to claim 2, further comprising an anti-twist device disposed between said loose bearing and said housing or between said support ring and said housing.

Claim 8 (previously presented): The worm gear according to claim 2, further comprising a leaf spring, said loose bearing connected via said leaf spring to said housing, said leaf spring extending perpendicularly to the longitudinal axis of said shaft and perpendicularly to the direction in which said loose bearing is displaceable between said housing and said loose bearing.

Claim 9 (previously presented): The worm gear according to claim 1, wherein said shaft is the rotor shaft of an electric motor.

Claim 10 (previously presented): The worm gear according to claim 1, wherein said worm is cantilevered on said shaft.

Claim 11 (previously presented): The worm gear according to claim 1, wherein said shaft is mounted in said housing by means of sleeve bearings or rolling bearings.

Claim 12 (previously presented): A gear assembly for a vehicle steering system comprising the worm gear of claim 1, an electric motor having three phases, and an output shaft wherein at least two of said phases of said electric motor are short-circuited and said electric motor is disconnected from a voltage supply when said electric motor is selected not to turn.

Claim 13 (previously presented): The worm gear according to claim 12, wherein said short-circuiting of at least two phases of said electric motor is effected by means of a relay or by means of FET semiconductor elements.

Claim 14 (previously presented): A servo unit for use in one of an electric servo steering system, a rack-and-pinion steering gear, a steering actuator, a speed modulation gear and steering actuator of a steer-by-wire steering system, said servo unit comprising the worm gear of claim 1.